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Shigeki Matsunaga

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EXAMINER

SINGH, SATWANT K

ART UNIT

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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/601,528

Applicant(s)

MATSUNAGA ET AL.

Examiner

Satwant K. Singh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 35-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 35-38, while defining a program, do not define a "computer-readable medium" and are thus non-statutory for that reason. A program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggest amending the claims to embody the program on a "computer-readable medium" in order to make the claims statutory.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-11, 22-25, 29-31, 33, 35, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parry (US 2003/0095284) in view of Agranat et al (US 6,456,308).

5. Regarding Claim 1, Parry teaches a print data providing apparatus for providing an external device with a print document consisting of a plurality of print data files (program files) (page 1, paragraph [0012]), the print data providing apparatus comprising: an archiving unit operable to archive the plurality of the print data files into a file (archive file) (page 2, paragraphs [0016]); and an output unit (imaging devices 110-1 to 110-N) operable to output the archived file to the external device (source transfers one or more jobs to one or more imaging devices 110-1 to 110-N for job processing) (page 2, paragraph [0015]).

Parry fails to teach an apparatus, with the document consisting of a plurality of data files described in different formats.

Agranat et al teach an apparatus, with the document consisting of a plurality of data files described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat to allow for the archiving of different type of data.

6. Regarding Claim 2, Parry teaches an apparatus, wherein the archiving unit archives the plurality of the print data files into the file (storing a job is based on the type of file received, the address received with the file, a separate identifier received with the

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file, or the like) (page 3, paragraph [0024]) after changing a name of one print data file of said plurality of the print data files to a specified name (print job information such as status, retrieval, location and modification of any of this information is accessed via control panel) (page 3, paragraph [0020]) ***(modification of the print job information is being interpreted as changing the identifier, interpreted as name, received with the file)***, said print data file being required in the first place by a printing apparatus in order to print the print document (each translated file is processed base on one or more user-defined operations) (page 2, paragraph [0017] –[0018]).

7. Regarding Claim 3, Parry teaches an apparatus, wherein the archiving unit archives one print data file of the plurality of the print data files in a specified position in the archived file (additional processing includes transmitting the file, storing the files in a designated directory, notifying the administrator of the receipt of the files or the like), said print data file being required in the first place by a printing apparatus in order to print the print document (each file translated into a print ready format with any associated permissions attached) (page 2, paragraph [0017] –[0018]).

8. Regarding Claim 4, Parry teaches an apparatus, wherein the output unit transmits to the external device information on a format of the archived file and a format of the print data files that are archived into the file (file translated into print-ready format) (page 2, paragraph [0017]).

9. Regarding Claim 5, Parry teaches an apparatus, wherein the archiving unit archives the plurality of the print data files in a Tar Ball format (tar files retain the

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owner/group name and permissions for each file with a tar ball) (page 2, paragraph [0017]).

10. Regarding Claim 7, Parry teaches an apparatus, wherein the archiving unit archives the plurality of the print data files in a compressed format (WinZip compresses the files that are archived) (page 2, paragraph [0016]).

11. Regarding Claim 8, Parry teaches an apparatus, further comprising: a receiving unit operable to receive the plurality of the print data files via a transmission line (source transfers one or more jobs to one or more imaging devices) (page 2, paragraph [0015]); and a first determination unit operable to determine whether or not the received plurality of the print data files compose a single print document (archive files contain one or more print jobs) (page 2, paragraph [0017]) wherein the archiving unit archives said plurality of the print data files into a file when it is determined that said plurality of the print data files compose the print document as a result of the determination (WinZip enables creation of an archive file) (page 2, paragraph [0016]).

12. Regarding Claim 9, Parry teaches an apparatus, further comprising: a receiving unit operable to receive the plurality of the print data files via a transmission line (source transfers one or more jobs to one or more imaging devices) (page 2, paragraph [0015]); a first determination unit operable to determine whether or not the received plurality of the print data files compose a single print document (archive files contain one or more print jobs) (page 2, paragraph [0017]); and a second determination unit operable to determine whether or not said received print data files is archive data (processor recognizes the type of file received) (page 2, paragraph [0017]), wherein the archiving

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unit archives the print data files into a file when the second determination unit determines that said print data files are not archive data (WinZip enables creation of an archive file) (page 2, paragraph [0016]) and the first determination unit determines that said print data files are a plurality of print data files composing a single print document (decompressing each file of the received archive files) (page 2, paragraph [0017]).

13. Regarding Claim 10, Parry teaches an apparatus, wherein the external device is a printing apparatus connected to the print data providing apparatus via a transmission line, and the output unit transmits the archived file to the printing apparatus (imaging device is coupled to a source that presents jobs for processing) (pages 1 and 2, paragraph [0013]).

14. Regarding Claim 11, Parry teaches an apparatus, wherein the external device is a removable storage medium mounted on the print data providing apparatus (storage device comprises magnetic media, optical media or the like) (page 2, paragraph [0014]).

15. Regarding Claim 22, Parry teaches a printing apparatus for acquiring a print document from a print data providing apparatus connected to the printing apparatus via a transmission line (imaging devices are coupled to a source that presents jobs for processing to imaging devices) (pages 1 and 2, paragraph [0012]), and for printing the acquired print document, the printing apparatus comprising: an acquisition unit operable to acquire an archived file from the print data providing apparatus, said archived file being an archive of a plurality of print data files, said plurality of the print data files composing a print document (archive file) (page 2, paragraphs [0016]); an expansion unit operable to expand the acquired archived file into each of the said plurality of the

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print data files (decompressing each of the received archive files into separate print jobs) (page 2, paragraph [0017]); and a print unit operable to print a print document, a combination of each of the expanded print data files (imaging devices 110-1 to 110-N adapted to receive jobs for processing) (page 2, paragraph [0014]).

16. Parry fails to teach an apparatus where the print data files are described in different formats.

Agranat et al teaches an apparatus where the print data files are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat to allow for the archiving of different type of data.

17. Regarding Claim 23, Parry teaches an apparatus, wherein the print unit further includes an analysis unit operable to analyze one specified print data file of the expanded print data files and combine each of said expanded print data files so that a print picture presented by each of said expanded print data files may compose a single print document (tar files retain the owner/group name and permissions for each file with a tar ball) (page 2, paragraph [0017]), and prints each of said expanded print data files according to the combination made by the analysis unit (transferring one or more print jobs to an appropriate directory based on file type) (page 2, paragraph [0018]).

18. Regarding Claim 24, Parry teaches an apparatus, wherein the analysis unit analyzes one print data file of the expanded print data files, having a specified name,

and combines each of said expanded print data files (transferring one or more print jobs to an appropriate directory based on file type) (page 2, paragraph [0018]).

19. Regarding Claim 25, Parry teaches an apparatus, wherein the analysis unit analyzes one print data file of the expanded print data files, and combines each of said expanded print data files, said one print data file being archived in a specified position in the archived file (transferring one or more print jobs to an appropriate directory based on file type) (page 2, paragraph [0018]).

20. Regarding Claim 29, Parry teaches a print data generating apparatus for generating print data files so that a printing apparatus may print a print document consisting of a plurality of print data files, the print data generating apparatus comprising an archiving unit operable to archive the plurality of the print data files into a file (storing a job is based on the type of file received, the address received with the file, a separate identifier received with the file, or the like) (page 3, paragraph [0024]) after the printing apparatus changes a name of one print data file of said plurality of the print data files to a specified name (print job information such as status, retrieval, location and modification of any of this information is accessed via control panel) (page 3, paragraph [0020]) ***(modification of the print job information is being interpreted as changing the identifier, interpreted as name, received with the file)***, the said one print data file being required of in the first place by the printing apparatus in order to print the print document (each translated file is processed based on one or more user-defined operations) (page 2, paragraphs [0017] - [0018]).

Parry fails to teach an apparatus where the print data files are described in different formats.

Agranat et al teach an apparatus where the print data files are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat to allow for the archiving of different type of data.

21. Regarding Claim 30, Parry teaches a print data generating apparatus for generating print data files so that a printing apparatus may print a print document consisting of a plurality of print data files, the print data generating apparatus comprising an archiving unit operable to archive one print data file of said plurality of the print data files in a specified position in an archived file (additional processing includes transmitting the file, storing the files in a designated directory, notifying the administrator of the receipt of the files or the like), said one print data file being required of in the first place by the printing apparatus in order to print the print document (each file translated into a print ready format with any associated permissions attached) (page 2, paragraph [0017] –[0018]).

Parry fails to teach an apparatus where the print data files are described in different formats.

Agranat et al teach an apparatus where the print data files are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat to allow for the archiving of different type of data.

22. Regarding Claim 31, Parry teaches a print system comprising a print data providing apparatus and a printing apparatus mutually connected via a transmission line, the print data providing apparatus includes: an archiving unit operable to archive a plurality of print data files into a file, said plurality of the print data files composing a print document (archive file) (page 2, paragraphs [0016]); and a transmission unit operable to transmit the archived file to the printing apparatus (imaging devices are coupled to a source that presents jobs for processing to imaging devices) (pages 1 and 2, paragraph [0012]), and the printing apparatus includes: an acquisition unit operable to acquire, from the print data providing apparatus, the archived file (jobs transferred from source) (page 2, paragraph [0016]) being an archive of a plurality of print data files, said plurality of the print data files composing the print document (archive file) (page 2, paragraphs [0016]); an expansion unit operable to expand the acquired archived file into each of said plurality of the print data files (decompressing each of the received archive files into separate print jobs) (page 2, paragraph [0017]); and a print unit operable to print the print document, a combination of each of the expanded print data files (imaging devices 110-1 to 110-N adapted to receive jobs for processing) (page 2, paragraph [0014]).

Parry fails to teach an apparatus where the print data files are described in different formats.

Agranat et al teach an apparatus where the print data files are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat to allow for the archiving of different type of data.

23. Regarding Claim 33, Parry teaches a print data transmission method for a print system comprising a print data providing apparatus and a printing apparatus mutually connected via a transmission line, wherein the print data providing apparatus includes the steps of: archiving a plurality of print data files into a file, said plurality of the print data files composing a print document (archive file) (page 2, paragraphs [0016]); and transmitting the archived file to the printing apparatus (imaging devices are coupled to a source that presents jobs for processing to imaging devices) (pages 1 and 2, paragraph [0012]), and the printing apparatus includes the steps of: acquiring, from the print data providing apparatus, the archived file being an archive of a plurality of print data files (jobs transferred from source) (page 2, paragraph [0016]), said plurality of the print data files composing a print document (archive file) (page 2, paragraphs [0016]); expanding the acquired archived file into each of the print data files (decompressing each of the received archive files into separate print jobs) (page 2, paragraph [0017]); and printing the print document being a combination of each of the expanded print data files (imaging devices 110-1 to 110-N adapted to receive jobs for processing) (page 2, paragraph [0014]).

Parry fails to teach an apparatus where the print data files are described in different formats.

Agranat et al teach an apparatus where the print data files are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat to allow for the archiving of different type of data.

24. Regarding Claim 35, Parry teaches a program for a print data providing apparatus for providing an external device with a print document consisting of a plurality of print data files, the program comprising the steps of: archiving said plurality of the print data files into a file (archive file) (page 2, paragraph [0016]) and outputting the archived file to the external device (source transfers one or more jobs to one or more imaging devices for job processing) (page 2, paragraph [0015]).

Parry fails to teach an apparatus where the print data files are described in different formats.

Agranat et al teach an apparatus where the print data files are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat to allow for the archiving of different type of data.

25. Regarding Claim 37, Parry teaches a program for a printing apparatus for acquiring a print document from a print data providing apparatus connected to the

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printing apparatus via a transmission line (imaging devices are coupled to a source that presents jobs for processing to imaging devices) (pages 1 and 2, paragraph [0012]), and for printing the acquired document, the program comprising the steps of: acquiring, from the print data providing apparatus, an archived file being an archive of a plurality of print data files, said plurality of the print data files composing a print document ((archive file) (page 2, paragraph [0016])); expanding the acquired archived file into each of said plurality of the print data files (decompressing each of the received archive files into separate print jobs) (page 2, paragraph [0017]); and printing the print document being a combination of each of the expanded print data files (imaging devices adapted to receive jobs for processing) (page 2, paragraph [0014]).

Parry fails to teach an apparatus where the print data files are described in different formats.

Agranat et al teach an apparatus where the print data files are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat to allow for the archiving of different type of data.

26. Claims 12-21, 26-28, 32, 34, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parry and Agranat et al as applied to claim 1 above, and further in view of Takashima (US 6,353,484).

27. Regarding Claim 12, Parry teaches a print data providing apparatus (source 160) for providing a printing apparatus (imaging device 101) connected to the print data

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providing apparatus via a transmission line with a print document consisting of a plurality of print data files (imaging devices are coupled to a source that presents jobs for processing to imaging devices) (pages 1 and 2, paragraph [0012]), said plurality of the print data files accompanied by information indicating that said plurality of the print data files to be transmitted are the print data files composing the print document (the processor uses the file name, file extension, header information, file format, additional information provided with the file, or the like to recognize the type of file received) (page 2, paragraph [0017]).

Parry fails to teach an apparatus where the documents are described in different formats.

Agranat et al teach an apparatus where the documents are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Parry and Agranat et al fail to teach a print data providing apparatus comprising a sequential transmission unit operable to sequentially transmit to the printing apparatus.

Takashima teaches teach a print data providing apparatus comprising a sequential transmission unit operable to sequentially transmit to the printing apparatus (sequential print declaration data, Fig. 4, S12) (col. 3, lines 66-67, col. 4, lines 1-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat and Takashima to provide sequential outputting of different types of print data to prevent the mixing of print data from different clients.

28. Regarding Claim 13, Parry teaches an apparatus, wherein the information is attached to one print data file to be transmitted in the first place, of the plurality of the print data files to be transmitted (the processor uses the file name, file extension, header information, file format, additional information provided with the file, or the like to recognize the type of file received) (page 2, paragraph [0017]).

29. Regarding Claim 14, Parry teaches an apparatus, wherein the information contains information on a format of the plurality of the print data files to be transmitted (the processor uses the file name, file extension, header information, file format, additional information provided with the file, or the like to recognize the type of file received) (page 2, paragraph [0017]) and a method of push transmitting said plurality of the print data files to the printing apparatus (additional processing includes transmitting the files, storing the files in a designated directory, notifying an administrator of the receipt of the files or the like)) (page 2, paragraph [0017]).

30. Regarding Claim 15, Parry and Agranat et al fail to teach an apparatus, wherein the sequential transmission unit transmits sequentially the plurality of the print data files accompanied by information on a total number and a transmitting order of said plurality of the print data files composing the print document.

Takashima teaches an apparatus, wherein the sequential transmission unit transmits sequentially the plurality of the print data files accompanied by information on a total number and a transmitting order of said plurality of the print data files composing the print document (Fig. 4, Step 12. sequential print declaration data) (col. 3, lines 66-67, col. 4, lines 1-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry and Agranat with the teaching of Takashima for sequential printing of a particular number of documents.

31. Regarding Claim 16, Parry and Agranat fail to teach an apparatus, wherein the sequential transmission unit transmits the plurality of the print data files accompanied by a flag indicating a completion of the transmission, attached to one print data file to be transmitted in the last place, of said plurality of the print data files composing the print document.

Takashima teaches an apparatus, wherein the sequential transmission unit transmits the plurality of the print data files accompanied by a flag indicating a completion of the transmission (number of document=0), attached to one print data file to be transmitted in the last place, of said plurality of the print data files composing the print document (Fig. 6, S47) (col. 5, lines 14-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry and Agranat with the teaching of Takashima to provide notification that the sequential printing has been completed.

32. Regarding Claim 17, Parry and teaches an apparatus, wherein the sequential transmission unit sequentially transmits further the plurality of the print data files accompanied by information indicating a format of one print data file that is presently transmitted, of said plurality of the print data files (processor uses the file name, file

extension, heard information, file format, or the like to recognize the type of file received) (page 2, paragraph [0017]).

33. Regarding Claim 18, Parry teaches an apparatus, wherein the sequential transmission unit sequentially transmits the plurality of print data files with a data name presenting a format of each of said plurality of the print data files (processor uses the file name, file extension, heard information, file format, or the like to recognize the type of file received) (page 2, paragraph [0017]).

34. Regarding Claim 19, Parry teaches wherein the sequential transmission unit sequentially transmits the plurality of the print data files accompanied by a header indicating a format of each of said plurality of the print data files (processor uses the file name, file extension, heard information, file format, or the like to recognize the type of file received) (page 2, paragraph [0017]).

35. Regarding Claim 20, Parry teaches an apparatus, wherein the sequential transmission unit firstly transmits one print data file of the plurality of the print data files, said print data file being required in the first place by the printing apparatus in order to print the print document (each file translated into a print ready format with any associated permissions attached) (page 2, paragraphs [0017]-[0018]).

36. Regarding Claim 21, Parry teaches an apparatus further comprising: a receiving unit operable to receive the plurality of the print data files via the transmission line (source transfers one or more jobs to one or more imaging devices) (page 2, paragraph [0015]); and a determination unit operable to determine whether or not the received plurality of the print data files compose the print document (archive files contain one or

more print jobs) (page 2, paragraph [0017]), accompanied by information indicating that said plurality of the print data files are the print data files composing the print document when it is determined that said plurality of the print data files compose the print document as a result of the determination (processor uses the file name, file extension, heard information, file format, or the like to recognize the type of file received) (page 2, paragraph [0017]).

Parry and Agranat fail to teach an apparatus wherein the sequential transmission unit sequentially transmits the plurality of the print data files, to the printing apparatus

Takashima teaches an apparatus wherein the sequential transmission unit sequentially transmits the plurality of the print data files, to the printing apparatus (sequential print declaration data, Fig. 4, S12) (col. 3, lines 66-67, col. 4, lines 1-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry and Agranat with the teaching of Takashima to provide sequential outputting of print data to prevent the mixing of print data from different clients.

37. Regarding Claim 26, Parry teaches a printing apparatus for acquiring a print document from a print data providing apparatus connected to the printing apparatus via a transmission line, and for printing the acquired print document (imaging devices are coupled to a source that presents jobs for processing to imaging devices) (pages 1 and 2, paragraph [0013]), wherein the print document consists of a plurality of print data files, and the printing apparatus comprises: an acquisition unit operable to acquire, from the print data providing apparatus, the plurality of the print data files (source transfers

files to one or more imaging devices using file transfer protocol) (page 2, paragraph [0015]) accompanied by information indicating that said plurality of the print data files compose the print document (the processor uses the file name, file extension, header information, file format, additional information provided with the file, or the like to recognize the type of file received) (page 2, paragraph [0017]); and print the print document being a combination of each of the acquired print data files (each translated file is processed based on one or more user-defined operations which could include printing the print jobs) (page 2, paragraph [0018]).

Parry fails to teach a printing apparatus where the print data files are described in different formats.

Agranat et al teach a printing apparatus where the print data files are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Parry and Agranat et al fail to teach a printing apparatus comprising: a sequential acquisition unit operable to sequentially acquire, from the print data providing apparatus, the plurality of the print data files; and a print unit operable to detect, based on the information, that the acquisition of said plurality of the print data files composing the single print document is complete.

Takashima teaches a printing apparatus comprising: a sequential acquisition unit operable to sequentially acquire, from the print data providing apparatus, the plurality of the print data files (sequential print declaration data, Fig. 4, S12) (col. 3, lines 66-67, col. 4, lines 1-18); and a print unit operable to detect, based on the information, that the

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acquisition of said plurality of the print data files composing the single print document is complete (number of document=0) (Fig. 6, S47) (col. 5, lines 14-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat and Takashima to provide notification that the sequential printing of a client has been completed.

38. Regarding Claim 27, Parry and Agranat fail to teach wherein the sequential acquisition unit sequentially acquires the plurality of the print data files accompanied by information indicating a total number and a transmitting order of said plurality of the print data files composing the print document, and the print unit detects, based on the information, that the acquisition of the total number of the print data files is complete, and prints the print document.

Takashima teaches wherein the sequential acquisition unit sequentially acquires the plurality of the print data files accompanied by information indicating a total number and a transmitting order of said plurality of the print data files composing the print document (sequential print declaration data, Fig. 4, S12) (col. 3, lines 66-67, col. 4, lines 1-18), and the print unit detects, based on the information, that the acquisition of the total number of the print data files is complete, and prints the print document (number of document=0) (Fig. 6, S47) (col. 5, lines 14-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry and Agranat with the

teaching of Takashima to provide notification that the sequential printing of a client has been completed.

39. Regarding Claim 28, Parry and Agranat fail to teach, wherein the sequential acquisition unit acquires the plurality of the print data files composing the print document accompanied by a flag indicating a completion of a transmission of said plurality of the print data files, and the print unit detects that the acquisition of the print data files is complete based on the flag, and prints the print document.

Takashima teaches wherein the sequential acquisition unit acquires the plurality of the print data files composing the print document accompanied by a flag indicating a completion of a transmission of said plurality of the print data files, and the print unit detects that the acquisition of the print data files is complete based on the flag, and prints the print document (number of document=0) (Fig. 6, S47) (col. 5, lines 14-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry and Agranat with the teaching of Takashima to provide notification that the sequential printing of a client has been completed.

40. Regarding Claim 32, Parry teaches a print system comprising a print data providing apparatus and a printing apparatus mutually connected via a transmission line, the print data providing apparatus includes: a transmission unit operable to transmit, to the printing apparatus (imaging devices are coupled to a source that presents jobs for processing to imaging devices) (pages 1 and 2, paragraph [0012]), each print data file accompanied by information indicating that a plurality of the print

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data files to be transmitted compose a single print document (WinZip file) (page 2, paragraph [0016]), and the printing apparatus includes: a acquisition unit operable to acquire a plurality of print data files (archive files are transferred from source) accompanied by information indicating that said plurality of the print data files compose a single print document (processor receives the file from sourced and recognizes the type of file received and then performs operations based on the type of file received) (page 2, paragraph [0017]); and a print unit operable to print the print document being a combination of each of the acquired print data files, after all the plurality of the print data files composing a single print document are acquired (each translated file is processed based on one or more user-defined operations which could include printing the print jobs) (page 2, paragraph [0018]).

Parry fails to teach an apparatus where the documents are described in different formats.

Agranat et al teach an apparatus where the documents are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Parry and Agranat et al fail to teach an apparatus comprising a sequential transmission unit and a sequential acquisition unit.

Takashima teaches teach a print data providing apparatus comprising a sequential transmission unit (queue in) and a sequential acquisition unit (queue out) (print data is output from the print queue in the order of print data reception) (col. 3, lines 54-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat and Takashima to provide sequential outputting of print data to prevent the mixing of print data from different clients.

41. Regarding Claim 34, Parry teaches a print data transmission method for a print system comprising a print data providing apparatus and a printing apparatus mutually connected via a transmission line (imaging devices are coupled to a source that presents jobs for processing to imaging devices) (pages 1 and 2, paragraph [0013]), wherein the print data providing apparatus includes a transmission step of sequentially transmitting, to the printing apparatus, each print data file accompanied by information indicating that a plurality of print data files to be transmitted compose a single print document (source transfers files to one or more imaging devices using file transfer protocol) (page 2, paragraph [0015]), and the printing apparatus includes the steps of: acquiring, from the print data providing apparatus (source transfers files to one or more imaging devices using file transfer protocol) (page 2, paragraph [0015]), a plurality of print data files accompanied by information indicating that said plurality of the print data files compose a single print document (processor receives the files from source) (page 2, paragraph [0017]); printing the print document, a combination of each of the acquired print data files, after all the plurality of the print data files composing a single document are acquired (each translated file is processed based on one or more user defined operations) (page 2, paragraph [0018]).

Parry fails to teach an apparatus where the documents are described in different formats.

Agranat et al teach an apparatus where the documents are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Parry and Agranat et al fail to teach an apparatus comprising sequentially transmitting and sequentially acquiring the print data.

Takashima teaches teach an apparatus comprising sequentially transmitting and sequentially acquiring the print data (print data is output from the print queue in the order of print data reception) (col. 3, lines 54-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat and Takashima to provide sequential outputting of print data to prevent the mixing of print data from different clients.

42. Regarding Claim 36, Parry teaches a program for a data providing apparatus for providing an external device with a print document consisting of a plurality of print data files, said plurality of the print data files accompanied by information indicating that said plurality of the print data files to be transmitted compose the print document (the processor uses the file name, file extension, header information, file format, additional information provided with the file, or the like to recognize the type of file received) (page 2, paragraph [0017]).

Parry fails to teach a program where the documents are described in different formats.

Agranat et al teach a program where the documents are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Parry and Agranat et al fail to teach the program comprising a sequential transmission step of sequentially transmitting, to the external device

Takashima teaches teach the program comprising a sequential transmission step of sequentially transmitting, to the external device (sequential print declaration data, Fig. 4, S12) (col. 3, lines 66-67, col. 4, lines 1-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of Agranat and Takashima to provide sequential outputting of print data to prevent the mixing of print data from different clients.

43. Regarding Claim 38, Parry teaches a program for a printing apparatus for acquiring a print document from a print data providing apparatus connected-to the printing apparatus via a transmission line, and for printing the acquired print document (imaging devices are coupled to a source that presents jobs for processing to imaging devices) (pages 1 and 2, paragraph [0013]), wherein the print document consists of a plurality of print data files, the program comprising the steps of: acquiring, from the print data providing apparatus, said plurality of the print data files accompanied by information indicating that said plurality of the print data files compose a single print document (the processor uses the file name, file extension, header information, file form, additional information provided with the file, or the like to recognize the type of file received) (page 2, paragraph [0017]); and printing the print document being a

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combination of each of the acquired print data files (each translated file is processed based on one or more user-defined operations which could include printing the print jobs) (page 2, paragraph [0018]).

Parry fails to teach a program where the documents are described in different formats.

Agranat et al teach a program where the documents are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Parry fails to teach a printing apparatus where the print data files are described in different formats.

Agranat et al teach a printing apparatus where the print data files are described in different formats (Fig. 14, content 1405 of storage device 1407) (col. 4, lines 57-60).

Parry and Agranat et al fail to teach a printing apparatus comprising: acquiring sequentially, the plurality of the print data files; and detecting, based on the information that the acquisition of the plurality of the print data files composing the single print document is complete.

Takashima teaches a printing apparatus comprising: acquiring sequentially, the plurality of the print data files (sequential print declaration data, Fig. 4, S12) (col. 3, lines 66-67, col. 4, lines 1-18); and detecting, based on the information that the acquisition of the plurality of the print data files composing the single print document is complete (number of document=0) (Fig. 6, S47) (col. 5, lines 14-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Parry with the teaching of

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Agranat and Takashima to provide notification that the sequential printing of a client has been completed.

Conclusion

44. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takashima (US 6,219,148) teaches a spooling method for sequentially printing a plurality of documents.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (571) 272-7468. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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